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09/534,321	03/24/2000	Adam J. Grove	10317-004-999	2426

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NEW YORK, NY 10036

EXAMINER

NGUYEN, QUANG N

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 11/07/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/534,321

Applicant(s)

GROVE ET AL.

Examiner

Quang N. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) 66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). 14.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13. 6) ☐ Other:

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***Detail Action***

1. This Office Action is in response to the Amendment A filed on 09/12/2003. Claims 1-66 are presented for examination. Claims 34-37, 39, 42, 45-49, 62, and 64-66 have been amended.

***Election/Restrictions***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-65 are drawn to a method and system for communicating an Internet message between a source and a destination over the Internet by selecting nodes of different types and communicating through said nodes using different protocols, classified in class 709, subclass 241 (Least Weight Routing).

II. Claim 66 is drawn to a method for communicating two Internet messages from a source to a destination comprising, separating first and second messages into corresponding first and second templates and first and second customization portion, communicating the first template and the second customization portion to the destination wherein the template includes information to reconstruct the second message from the second customization portion, classified in class 709, subclass 247 (Compressing/Decompressing).

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3. The inventions are distinct, each from each other because of the following reasons:

Inventions Group I and Group II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group I has separate utility such as communicating an Internet message between a source and a destination over the Internet by selecting nodes of different types and communicating through said nodes using different protocols (**classified in 709/241**). Invention Group II has separate utility such as communicating two Internet messages from a source to a destination comprising, separating first and second messages into corresponding first and second templates and first and second customization portion, communicating the first template and the second customization portion to the destination wherein the template includes information to reconstruct the second message from the second customization portion (**classified in 709/247**). See MPEP § 806.05(d).

4. The inventions are distinct, each from each other because of the following reasons:

a. These inventions have acquired a separate status in the art as shown by their different classification and their recognized divergent subject matter.

b. The search required for one Group is not required for the other Group.

For the reasons above, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with the applicant's representative, Mrs. Wendi R. Schepler, on 10/28/2003 a provisional election was made without traverse to prosecute the invention of Adam Grove et al., SN 09/534,321, claims 1-66. Affirmation of this election must be made by applicant in replying to this Office action. Claim 66 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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**7. Claim 1-19 and 36-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Gerstel (US 6,141,325).**

8. As to claim 1, Gerstel teaches a method for communicating an Internet message between a source and a destination over the Internet, comprising:

selecting a node of a first type (the network control "NC" of the source node queries its agents to select a node 102 in subnet C of Fig. 1);

selecting a node of a second type (the network control "NC" of the source node queries its agents to select a node 102 in subnet D of Fig. 1);

communicating an Internet message from the source (the source node 103 in subnet A) to the node of the first type (the selected node 102 in subnet C) using a first protocol (wherein the subnets A, B, C, and D all require different operating protocols);

communicating the Internet message from the node of the first type (the selected node 102 in subnet C) to the node of the second type (the selected node 102 in subnet D) using a second protocol (wherein the subnets A, B, C, and D all require different operating protocols); and

communicating the Internet message from the node of the second type (the selected node 102 in subnet D) to the destination (the destination node 104 in subnet B) using a third protocol (the subnets A, B, C, and D all require different operating protocols) (Gerstel, Fig. 1 and corresponding text, C3: L1-4, L34-65, and C4: L45-54).

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9. As to claim 2, Gerstel teaches a method for communicating an Internet message between a source and a destination over the Internet, comprising:

selecting a node of a first type (the network control "NC" of the source node queries its agent to select a node 102 in subnet C of Fig. 1);

communicating an Internet message from the source (the source node 103 in subnet A) to the node of the first type (the selected node 102 in subnet C) using a first protocol (wherein the subnets A, B, C, and D all require different operating protocols);

communicating the Internet message from the node of the first type (the selected node 102 in subnet C) to the node of the second type (the selected node 102 in subnet D) using a second protocol (wherein the subnets A, B, C, and D all require different operating protocols); and

communicating the Internet message from the node of the second type (the selected node 102 in subnet D) to the destination (the destination node 104 in subnet B) using a third protocol (wherein the subnets A, B, C, and D all require different operating protocols) (Gerstel, Fig. 1 and corresponding text, C3: L1-4, L34-65, and C4: L45-54).

10. As to claims 3-8, Gerstel teaches the method of claims 1-2, wherein the selecting steps (a) and (b) comprises:

for each of a plurality of candidate nodes of the first type and each of a plurality of candidate nodes of the second type, determining a measure of communications performance (such as bandwidth, quality of service "QoS", cost factors, etc) for selecting a combination of a node of the first type and a node of the second type to

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optimize the measure of communications performance between the source and the destination (Gerstel, Figs. 10A-10B and corresponding text, C3: L60-65).

11. As to claim 9, Gerstel teaches a method for communicating an Internet message between a source and a destination over the Internet, comprising:

selecting a node of a first type and a node of a second type (the network control "NC" of the source node queries its agents to select a node 102 in subnet C and a node 102 in subnet D);

communicating an Internet message from the source (the source node 103 in subnet A) to the node of the first type (the selected node 102 in subnet C) using a first protocol (wherein the subnets A, B, C, and D all require different operating protocols);

communicating the Internet message from the node of the first type (the selected node 102 in subnet C) to the node of the second type (the selected node 102 in subnet D) using a second protocol (wherein the subnets A, B, C, and D all require different operating protocols); and

communicating the Internet message from the node of the second type (the selected node 102 in subnet D) to the destination (the destination node 104 in subnet B) using a third protocol (wherein the subnets A, B, C, and D all require different operating protocols) (Gerstel, Fig. 1 and corresponding text, C3: L1-4, L34-65, and C4: L45-54).

12. As to claims 10-12, Gerstel teaches the method of claim 9, wherein the selecting step (a) comprises:



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for each of a plurality of candidate nodes of the first type and each of a plurality of candidate nodes of the second type, determining a measure of communications performance (such as bandwidth, quality of service "QoS", cost factors, etc) for selecting a combination of a node of the first type and a node of the second type to optimize the measure of communications performance between the source and the destination (Gerstel, Figs. 10A-10B and corresponding text, C3: L60-65).

13. Claims 13 and 14 are corresponding method claims of claim 1 and 9 with reverse direction; therefore, they are rejected under the same rationale.

14. As to claim 15, Gerstel teaches a method for communicating an Internet message between a source and a destination over the Internet, comprising:

selecting a node of a first type (the network control "NC" of the source node queries its agent to select a node 102 in subnet C of Fig. 1);

communicating an Internet message from the source (the source node 103 in subnet A) to the node of the first type (the selected node 102 in subnet C) using a first protocol (wherein the subnets A, B, C, and D all require different operating protocols);

a node of a second type (a selected node 102 in subnet D) intercepting an Internet message from the node of the first type (the selected node 102 in subnet C), the Internet message from the node of the first type being communicated using a second protocol (wherein the subnets A, B, C, and D all require different operating protocols);

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communicating the Internet message from the node of the second type (the selected node 102 in subnet D) to the destination (the destination node 104 in subnet B) using a third protocol (wherein the subnets A, B, C, and D all require different operating protocols) (Gerstel, Fig. 1 and corresponding text, C3: L1-4, L34-65, and C4: L45-54).

15. As to claim 16, Gerstel teaches a method for communicating an Internet message between a source and a destination over the Internet, comprising:

selecting a node of a second type (the network control "NC" of the source node queries its agent to select a node 102 in subnet D of Fig. 1);

a node of a first type (a selected node 102 in subnet C) intercepting an Internet message from the source (the source node 103 in subnet A), the Internet message from the source being communicated using a first protocol (wherein the subnets A, B, C, and D all require different operating protocols);

communicating the Internet message from the node of the first type (the selected node 102 in subnet C) to the node of the second type (the selected node 102 in subnet D) using a second protocol (wherein the subnets A, B, C, and D all require different operating protocols); and

communicating the Internet message from the node of the second type (the selected node 102 in subnet D) to the destination (the destination node 104 in subnet B) using a third protocol (wherein the subnets A, B, C, and D all require different operating protocols) (Gerstel, Fig. 1 and corresponding text, C3: L1-4, L34-65, and C4: L45-54).

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16. As to claims 17-18, Gerstel teaches the method of claims 1-2, wherein the communicating step (c) of claim 1 and step (b) of claim 2 comprise redirecting the Internet message from the source to the node of the first type (i.e., redirecting the Internet message from the source node 103 in subnet A to the selected node 102 in subnet C) (Gerstel, Fig. 1 and corresponding text, C3: L1-4, L34-65, and C4: L45-54).

17. As to claim 19, Gerstel teaches the method of claim 9, wherein the communicating step (b) comprises redirecting the Internet message from the node of the first type to the node of the second type (i.e., redirecting the Internet message from the selected node 102 in subnet C to the selected node 102 in subnet D) (Gerstel, Fig. 1 and corresponding text, C3: L1-4, L34-65, and C4: L45-54).

18. Claims 36-49 are corresponding system claims of method claims 1-14; therefore, they are rejected under the same rationale.

### ***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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**20. Claims 20-33, 50-61 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerstel, in view of Gelman et al. (US 6,415,329), herein after referred as Gelman.**

21. As to claims 20-22 and 25-26, Gerstel teaches the method of claims 1-2, 9 and 15-16, but does not explicitly teach wherein the first protocol is a standard protocol, the second protocol is a high-performance protocol, and the third protocol is a standard protocol.

In the related art, Gelman teaches a method for communicating an Internet message between a source and a destination over the Internet using different protocols, wherein the first protocol is a standard protocol (such as TCP), the second protocol is a high-performance protocol (such as WLP), and the third protocol is a standard protocol (such as TCP) (Gelman, Fig. 10 and corresponding text, C15: L55-64).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Gerstel and Gelman to implement/use a standard protocol for the first protocol, a high-performance protocol for the second protocol, and a standard protocol for the third protocol because it would allow the system to improve/optimize the performance of the TCP/IP protocol suite while transmitting packets (i.e., Internet messages) over different environments/subnets using protocols conversion/translation, which were conventionally employed in the art.

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22. As to claims 23-24, Gelman teaches the method of claims 13-14, wherein the fourth protocol is a standard protocol (as TCP), the fifth protocol is a high-performance protocol (as WLP), and the sixth protocol is a standard protocol (as TCP).

23. As to claims 27-33, Gelman teaches the method of claims 20-26, wherein the Internet message is a World Wide Web message (HTTP transfer file test).

24. Claims 50-61 and 63 are corresponding system claims of claims 20-33; therefore, they are rejected under the same rationale.

**25. Claims 34-35 and 64-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao (US 6,081,840), in view of Gerstel.**

26. As to claim 34, Zhao teaches a method for providing web content to a source from a destination (Fig. 1), comprising:

communicating an Internet message to request web content from a source to a node (individual users 22-28 connect to a local content server 14-16 and request a data file);

if the node (local content server 14-16) includes the requested web content in its cache, communicating the web content from the node to the source (if the file is located at the local server, it is provided by the local server to the user); and

if the node does not include the requested web content in its cache, communicating the Internet message requesting web content from the node (local content server 14-16) to the destination (source content server 10) (Zhao, Abstract, Fig. 1 and corresponding text).

However, Zhao does not explicitly teach the node is selected so as to optimize a measure of communications performance for a sub-link between the node and the destination.

In the related art, Gerstel teaches a method for selecting a node (or a subnet) from a plurality of candidate nodes by querying its resident agents based on the topology map database to optimize a measure of communications performance (such as data, bandwidth, quality of service "QoS", cost factors, etc) for a sub-link between the node and the destination (Gerstel, Figs. 10A-10B and corresponding text, C3: L60-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Zhao and Gerstel to include the step of selecting a node so as to optimize a measure of communications from a node to a destination because it would allow the system to improve network routing calculations for routing data between two points and select the optimum routing path between the source and the destination from among possible routes to improve efficiency of data file distribution to remote users over the communication networks.

27. As to claim 35, Zhao-Gerstel teaches the method of claim 34, wherein the measure of communication performance is a combination of the network distance

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between the source and the node, the network distance between the node and the destination, and the probability that the requested web content is in the cache of the node (i.e., to optimize the measure of communication performance combination of various criteria such as shortest path, data, bandwidth, quality of service "QoS", cost factors, etc) (Gerstel, Figs. 10A-10B and corresponding text, C3: L60-65).

28. Claims 64-65 are corresponding system claims of method claims 34-35; therefore, they are rejected under the same rationale.

### ***Claim Objections***

29. Claim 62 is objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

30. Applicant's arguments as well as request for reconsideration filed on 09/12/2003 have been fully considered but they are moot in view of the new ground(s) of rejection.

31. Further references of interest are cited on Form PTO-892, which is an attachment to this office action.

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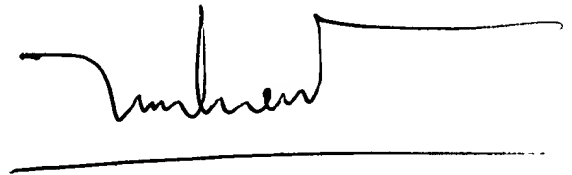
32. A shortened statutory period for reply to this action is set to expire THREE (3) months from the mailing date of this communication. See 37 CFR 1.134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (703) 305-8190.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (703) 305-4003. The fax phone number for the organization is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Quang N. Nguyen

A handwritten signature in black ink, appearing to read 'Le Hien Luu', written over a horizontal line.

LE HIEN LUU  
PRIMARY EXAMINER